

ACADEMIC ADVISEMENT AND STUDENT RETENTION: EMPIRICAL CONNECTIONS & SYSTEMIC INTERVENTIONS

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Purpose and Scope of this Manuscript

Advising and retention are terms found frequently married in higher education discourse; they seem to fit together like hand and glove. For example, academic advising has been referred to as the “cornerstone of student retention” (Crockett, 1978). While the practice of advising and the outcome of student retention are often connected conceptually, their empirical connection has yet to be carefully documented and systematically synthesized. The primary purpose of this manuscript is to provide such documentation and synthesis. Although a direct, causal connection between advising and retention has yet to be established, a strong case can be made that academic advising exerts a significant impact on student retention through its positive association with, and mediation of, variables that are strongly correlated with student persistence, namely: (1) student satisfaction with the college experience, (2) effective educational and career planning and decision making, (3) student utilization of campus support services, (4) student-faculty contact outside the classroom, and (5) student mentoring.

As Wyckoff (1999) notes, “To establish a high degree of commitment to the academic advising process, university and college administrators must become cognizant not only of the educational value of advising but of the role advising plays in the retention of students” (p. 3). The evidence marshaled in this manuscript may be used as a position paper to persuade high-level administrators of the power of effective academic advisement for student retention and institutional revenue. It may also be used in advisor development programs—to motivate and validate the work of veteran advisors, and in advisor-orientation programs—to inspire and energize new advisors.

The manuscript begins with a discussion of why both student retention and academic advisement deserve immediate attention in American higher education, and it ends with a series of suggested systemic strategies for enhancing the quality and retention-promoting impact of advising programs.

The Case for Attention to Student Retention

The majority of new students entering higher education leave their initial college of choice without completing a degree (Tinto, 1993), and national attrition rates have been increasing since the early 1980s at two-year and four-year institutions, both public and private (Postsecondary Education Opportunity, 2002). The most critical period or stage of vulnerability for student attrition continues to be the first year of college—at all types of higher education institutions, including highly selective colleges and universities (“Learning Slope,” 1991). More than half of all students who withdraw from college do so during their first year (Consortium for Student Retention Data Exchange, 1999), resulting in a first-year attrition rate of more than 25% at four-year institutions, and approximately 50% at two-year institutions (ACT, 2001).

The economic implications of these alarmingly high rates of attrition for enrollment management was anticipated more than 20 years ago by John Gardner, during the nascent stages of the freshman-year experience movement he helped launch: “Higher education must make changes if it is

to survive in anything resembling its present form. The student has become a precious commodity. Institutions must now concern themselves with retaining students so that, if nothing else, budgets can be preserved” (Gardner, 1981, p. 79). Vince Tinto, a nationally recognized retention scholar, notes further that strengthening institutional efforts aimed at increasing student retention may be a more effective enrollment-management strategy than devoting more resources to increasing student recruitment: “As more institutions have come to utilize sophisticated marketing techniques to recruit students, the value of doing so has diminished markedly. Institutions have come to view the retention of students to degree completion as the only reasonable cause of action left to ensure their survival” (Tinto, 1987, p. 2).

The cost effectiveness of focusing on student retention as an enrollment management strategy is insightfully captured by Alexander Astin, who reminds us that, “In four-year institutions, any change that deters students from dropping out can affect three classes of students at once, whereas any change in recruiting practices can affect only one class in a given year. From this viewpoint, investing resources to prevent dropping out may be more cost effective than applying the same resources to more vigorous recruitment” (1975, p. 2). In fact, cost-benefit analyses of student recruitment efforts, which require substantial institutional expenditures (e.g., hiring of staff, travel funding, and marketing costs), range between \$200-\$800 per student (Kramer, 1982). In contrast, retention initiatives designed to manage student enrollment are estimated to be 3-5 times more cost-effective than recruitment efforts, i.e., the cost of recruiting one new student to college approximates the cost of retaining 3-5 already enrolled students (Noel, Levitz, & Saluri, 1985; Rosenberg & Czepiel, 1983; Tinto, 1975). Another fiscal advantage associated with student retention efforts that effectively promote student persistence to graduation is that graduating students are much less likely to default on their student loans than students who drop out—due, in large measure, to the fact that graduates are more likely to find gainful employment (Seaks, cited in Levitz, 1993).

Most importantly, however, improving student retention not only fulfills the institutionally self-serving function of promoting fiscal solvency, it serves the more altruistic, student-centered purpose of promoting learning and development. As Astin (1975) notes: “More important from an educational standpoint, changes that help students complete college, represent a real service to them, whereas successful recruiting efforts may simply change students’ choice of institutions” (p. 2).

Lastly, it should not be forgotten that student retention is an assessment *outcome*, and one that is amenable to accurate measurement. Furthermore, retention functions as a fundamental or foundational student outcome, serving as a precondition or prerequisite for meaningful assessment of other outcomes. For instance, other commonly assessed outcomes of college, such as knowledge acquisition, critical thinking, and attitude change, cannot possibly be accurately measured as final outcomes of the college experience unless and until students have persisted to completion of the college experience. Any outcome assessment data collected on students who have graduated from a postsecondary institution where sizable numbers of other students have withdrawn prior to degree completion (e.g., institutional attrition rates of 50% or higher) is, in effect, conducting assessment on an *unrepresentative* sample of students, i.e., these college graduates do not represent the general population of students who matriculated at the college. Using a medical metaphor, if 50% of a school’s entering class completes their college experience and displays positive outcomes at graduation and the college concludes that it is doing an effective job, it would be akin to a pharmaceutical company concluding that a newly approved drug was highly successful because it produced positive outcomes for 50% of the patients who completed the drug-treatment plan, while blithely ignoring the fact that one-half of the treated patients failed to complete the treatment plan due to the drug’s intolerable side effects and high mortality rate. Thus, it may be argued that any institution seriously interested in outcomes assessment should include student retention as a

primary outcome measure, and should use it to make meaningful interpretations of other assessed outcomes.

Lastly, if the ultimate purpose of assessment is institutional improvement, then improvement in student retention should be an intended outcome of any postsecondary institution that is serious about using assessment results as a vehicle for promoting positive institutional change. Given the distressingly high levels of student attrition at many colleges and universities, retention represents a student outcome that can be dramatically improved, not only because there is so much room for improvement, but also because it is influenced as much or more by *institutional* behavior than by student characteristics (e.g., lack of academic motivation or academic underpreparedness). As Tinto (1987) reports:

Though the intentions and commitment with which individuals enter college matter, what goes on after entry matters more. It is the daily interaction of the person with other members of the college in both the formal and informal academic and social domains of the college and the person's perception or evaluation of the character of those interactions that in large measure determine decisions as to staying or leaving. It is in this sense that most departures are voluntary. Student retention is at least as much a function of institutional behavior as it is of student behavior (pp. 127, 177).

The Case for Attention to *Academic Advisement*

Academic advising is one of the major academic and social domains of the college experience that affect student decisions about staying or leaving. Findings from national advising surveys, conducted regularly for the past 25 years by American College Testing (ACT), repeatedly point to the following elements as being essential to, but often absent from, academic advisement programs in higher education.

1. Formulation of a program mission statement that clearly articulates the *meaning and purpose* of academic advising.

Only 54% of postsecondary institutions have a written statement that articulates the purposes and procedures of their advising program (Crockett, Habley, & Cowart, 1987). At best, this suggests a lack of clarity about program mission and goals; at worst, it suggests that advising is not considered to be a bona fide educational program with important goals and objectives.

2. Provision of sufficient *incentives, recognition, and reward* for effective academic advising.

Approximately one-half of faculty contracts and collective bargaining agreements make absolutely no mention of advising as a faculty responsibility (Teague & Grites, 1980). Less than one-third of campuses recognize and reward faculty for advising and, among those that do, advising is typically recognized by giving it only minor consideration in faculty promotion and tenure decisions (Habley, 1988). A more recent survey of first-year academic practices at close to 1,000 colleges and universities revealed that only 12% of postsecondary institutions offered incentives or rewards that recognize outstanding advising of first-year students (Policy Center on the First Year of College, 2003).

In a review of national survey data relating to advisor evaluation and rewards, Creamer & Scott (2000) reached the following conclusion: “The failure of most institutions to conduct systematic evaluations of advisors is explained by a number of factors. The most potent reason, however, is probably that the traditional reward structure often blocks the ability to reward faculty who are genuinely committed to advising” (p. 39).

3. Established *criteria* for the *recruitment, selection, and deployment* of academic advisors.

Over two-thirds (68%) of postsecondary institutions surveyed have no criteria for selecting advisors (Crockett, Habley, & Cowart, 1987), suggesting lack of attention to professional preparedness of academic advisors and indifference to the identification of advisors most qualified to work with students who are at risk for attrition—e.g., underprepared and underrepresented first-generation students, or students with special needs—e.g., undecided students, transfer students, commuter students, and re-entry students.

It is also noteworthy (and disturbing) that academic advising effectiveness is almost never mentioned as one of the selection criteria listed in job advertisements or position announcements posted by postsecondary institutions seeking to recruit and hire new faculty.

4. Substantive *orientation, training, and development* of academic advisors.

Only about one-third of college campuses *provide* training for faculty advisors; less than one-quarter *require* faculty training; and the vast majority of institutions offering training programs focus solely on dissemination of factual information, without devoting significant attention to the identification of the goals or objectives of advising, and the development of effective advising strategies or relationship skills (Habley, 1988).

The upshot of the foregoing findings is encapsulated in the following conclusion reached by Habley (2000), based on his review of findings from five national surveys of academic advising: “A recurrent theme, found in all five ACT surveys, is that training, evaluation, and recognition and reward have been, and continue to be, the weakest links in academic advising throughout the nation. These important institutional practices in support of quality advising are at best unsystematic and at worst nonexistent” (p. 40). This conclusion, based on national surveys, is reinforced by national reports on the status of American higher education. For instance, a blue-ribbon panel of higher education scholars working under the auspices of the National Institute of Education (1984), concluded that, “Advisement is one of the weakest links in the education of college students” (p. 31). Similarly, a national report issued by the Carnegie Foundation, based on three years of campus visits and extensive national survey research, arrived at the following conclusion: “We have found advising to be one of the weakest links in the undergraduate experience. Only about a third of the colleges in our study had a quality advisement program that helped students think carefully about their academic options” (Boyer, 1987, p. 51).

Empirical Relationships between Student Advisement and Student Retention

While there appears to be a long-standing logical link between high-quality advising and high rates of student retention, their empirical connection has yet to be systematically demonstrated. Described below is a series of research findings that provide evidence for an empirical link, albeit indirect, between academic advisement and factors or conditions that are strongly correlated with student retention.

1. *College Satisfaction, Academic Advising, and Student Retention*

There is a well-established empirical relationship between students' level of *satisfaction* with the postsecondary institution they are attending and their rate of *retention* at that institution (Noel, Levitz, & Saluri, 1985), i.e., college satisfaction is a "primary predictor" of student persistence (Noel & Levitz, 1995). Furthermore, college satisfaction is an assessment outcome that has been found to be the least influenced or confounded by students' college-entry characteristics—e.g., academic preparedness, educational aspirations, gender, and socioeconomic status (Astin, 1991).

Research on student satisfaction with the quality of academic advisement in higher education reveals a pattern of disappointing findings. Astin (1993) reports the results of a national survey in which advising ranked 25th among the 27 different types of services evaluated by students, with only 40% of the surveyed students indicating that they were either "satisfied" or "very satisfied" with the quality of academic advising they received at their college. In their seminal and influential tome, *Developmental Academic Advising*, Ender, Winston, & Miller (1984) conclude categorically that, "The greatest difficulty students cite with the quality of their academic experiences is advising" (p. 14). Ironically, despite widespread dissatisfaction with advising, students express a strong desire for advisor contact and place a high value on academic counseling relative to other student services (Wyckoff, 1999).

Given the fact that student satisfaction is a "pure" outcome that is unlikely to be confounded or "contaminated" by students' personal characteristics, its established association with student retention, plus empirical evidence pointing to low levels of student satisfaction with academic advising in higher education, it is reasonable to conclude that institutional efforts that are intentionally designed to improve student satisfaction with academic advising should serve to improve students' level of college satisfaction and, in turn, their retention to degree completion.

Empirical evidence for a relationship between student satisfaction with the quality of advising received at their college and their retention at that college is provided by Metzner (1989), who conducted a longitudinal investigation of freshman-to-sophomore retention rates of students enrolled at public university. The study involved a large sample of first-year students and it incorporated a sizable number of influential student variables (e.g., students' academic preparedness, employment status while in college, college grades, and college satisfaction). Results revealed that students who perceived advising to be of "good quality" withdrew from the university at a rate that was 25% lower than that of students who reported receiving "poor advising," and they withdrew at a rate that was 40% less than that of students who received no advising at all. Further data analysis revealed that high-quality advising had a statistically significant, indirect effect on student persistence, which was mediated by its positive association with students' level of college satisfaction and its negative (inverse) association with students' intent to leave the university.

National surveys of student retention practices provide additional evidence for a link between institutional improvement made in the quality of advising delivered to students and improvement in student retention. For instance, in a national survey of 944 colleges and universities, college administrators identified "inadequate academic advising" as the number-one characteristic linked to student attrition on their campuses; the same administrators reported that "improvement of academic advising services" was the most common retention strategy adopted by their institutions (Beal & Noel, 1980). The effectiveness of this institutional strategy is suggested by other national-survey data indicating that institutions which make improvements in their academic advising programs experience substantial gains in their student retention rates (Cartensen & Silberhorn, 1979).

Consistent with the foregoing survey findings are the on-site observations of Lee Noel, a nationally recognized student-retention scholar and consultant, who reports: “In our extensive work on campuses over the years, [we] have found that institutions where significant improvement in retention rates has been made, almost without exception, give extra attention to careful life planning and to academic advising” (Noel, 1985, p. 13).

2. Effective *Educational & Career Planning/Decision-Making*, Academic Advising, and Student Retention

Retention research suggests that student commitment to educational and career goals is perhaps the strongest factor associated with student persistence to degree completion (Wyckoff, 1999). Thus, effective advising can exert appreciable impact on student retention through its salutary influence on students’ educational and career planning and decision-making. The need for student support in the academic planning and decision-making process is highlighted by research findings, which indicate that (a) three of every four students are uncertain or tentative about their career choice at college entry (Titley & Titley, 1980; Frost, 1991), (b) only 8% of new students feel they know “a great deal about their intended major” (Lemoine, cited in Erickson & Summers, 1991) (c) over half of all students who enter college with a declared major change their mind at least once before they graduate (Foote, 1980; Gordon, 1984), and (d) only one senior out of three will major in the same field they preferred as a freshman (Willingham, 1985). This degree of student uncertainty and propensity for changing educational plans has been reported at all institutional types, including selective private universities (Marchese, 1992), large research universities (“What We Know About First-Year Students,” 1996; What Do I Want to Be,” 1997), and small liberal arts colleges (“Alpha Gives Undecided Students a Sense of Identity,” 1996).

Such findings strongly suggest that students’ final decisions about majors and careers do *not* occur *before* entering college, but typically materialize *during* the college experience. Thus, it is not accurate to assume that students who enter college with “declared” majors are truly “decided” majors; instead, it is more accurate to conclude that 75% of all students entering college are actually undecided about their academic and career plans, and at least half of all declared majors are “prematurely decided” majors, who will eventually change their minds.

Naturally, some of this indecisiveness and changing of direction about majors is healthy, reflecting initial exploration and eventual crystallization of educational goals that naturally accompany personal maturation and increased experience with the college curriculum. It is unrealistic to expect first-year students to make long-term educational commitments until they have gained experience with specific courses and academic programs that comprise the college curriculum, some of which they may have never encountered in high school (e.g., philosophy or anthropology). As Vince Tinto, nationally recognized scholar on student retention, points out:

Among any population of young adults who are just beginning in earnest their search for adult identity, it would be surprising indeed if one found that most were very clear about their long-term goals. The college years are an important growing period in which new social and intellectual experiences are sought as a means of coming to grips with the issue of adult careers. They enter college with the hope that they will be able to formulate for themselves, not for their parents, a meaningful answer to that important question. Lest we forget, the college experience is as much, if not more, one of discovery as one of confirmation (Tinto, 1993, p. 40).

While acknowledging this healthy trial-and error process of discovery, it is also true that some of the student vacillation underlying the major-changing phenomenon reflects confusion,

procrastination, or premature decision-making—due to students’ lack of knowledge about themselves and their compatibility with their initial choice, or lack of knowledge about the relationship between college majors and future careers. Upcraft, Finney, and Garland (1984) also note that some of the confusion about majors and careers may result from, “Students [being] pushed into careers by their families, while others have picked one just to relieve their anxiety about not having a career choice. Still others may have picked popular or lucrative careers, knowing nothing of what they’re really like or what it takes to prepare for them” (p. 18).

The relationship between effective educational decision-making and student retention is empirically documented by Astin (1975), whose research indicates that *prolonged* indecision about an academic major and career goals is correlated with student attrition. Lenning, Beal, and Sauer (1980) also report that students’ goal motivation/commitment correlates positively with persistence to graduation, and this correlation has been found to hold true for both men and women (Anderson, 1988). In addition, Willingham (1985) reports “poor sense of direction” to be one of the most frequently cited reasons identified by students as a factor that detracted from their experiencing a more successful and satisfying college career. In fact, Levitz and Noel (1989) found “lack of certainty about a major and/or career” to be the number-one reason cited by high-ability students for their decision to drop out of college. The implication of these findings for academic advising is suggested by survey data gathered from 947 institutions by Beal and Noel (1980), who found that, “Many students transfer—or sometimes drop out—simply because they do not know that a particular course of study is available at their college, or because they think they cannot have a particular option in their program of studies” (p. 103).

College students clearly need support from effective academic advisors to negotiate the challenging and sometimes confusing process of educational planning and decision-making. As Tinto emphatically states:

It is part of the educational mandate of institutions of higher education to assist maturing youth in coming to grips with the important question of adult careers. The regrettable fact is that some institutions do not see student uncertainty in this light. They prefer to treat it as a deficiency in student development rather than as an expected part of that complex process of personal growth. The implications of such views for policy are not trivial [because] unresolved intentions over an extended period can lead to departure both from the institution and from the higher educational enterprise as a whole. When plans remain unformulated over extended periods of time, students are more likely to depart without completing their degree programs (Tinto, 1993, p. 41).

Viewed collectively, the research reviewed in this section point directly to the conclusion that students need support from knowledgeable academic advisors to engage in effective educational planning and decision-making, and if this support is received, they will more likely persist to degree graduation.

Moreover, if this support is delivered proactively to first-year students, they may make more thoughtful, more accurate, *initial* choices about majors and careers. This may serve not only to promote student retention, but also reduce the probability of prolonged student indecisiveness and premature decision-making, which can eventuate in changing of majors at later stages in the college experience. Student indecisiveness and late major-changing may result in delayed progress toward degree completion by necessitating the need for students to complete additional courses to fulfill specific degree requirements for their newly chosen major. This may be one factor contributing to the extended length of time it now takes college students to complete their graduation requirements (U.S. Bureau of Census, 1994); for example, the number of students who take five or

more years to graduate from college has doubled since the early 1980s (Kramer, 1993). It is reasonable to anticipate that receipt of proactively delivered developmental advising will promote earlier and more complete crystallization of college students' major and career plans, thereby reducing their average time to degree completion.

3. *Student Utilization of Campus Support Services and Academic Advising*

One way in which colleges can improve both the academic performance and retention of first-year students is by increasing their utilization of campus support services, because research clearly suggests that there is a positive relationship between utilization of campus-support services and persistence to program or degree completion (Churchill & Iwai, 1981; Pascarella & Terenzini, 1991). In particular, students who seek and receive academic support have been found to improve both their *academic performance* and their *academic self-efficacy*—that is, they develop a greater sense of self-perceived control of academic outcomes, and develop higher self-expectations for future academic success (Smith, Walter, & Hoey, 1992). Higher levels of self-efficacy, in turn, have been found to correlate positively with college students' academic performance and persistence; this is true for Hispanic students in particular (Solberg, O'Brien, Villareal, & Davis, 1993) and underprepared students in general (Lent, Brown, & Larkin, 1987).

Unfortunately, it has also been found that college students *under-utilize* academic support services (Friedlander, 1980; Walter & Smith, 1990), especially those students who are in most need of support (Knapp & Karabenick, 1988; Abrams & Jernigan, 1984). At-risk students, in particular, have trouble recognizing that they are experiencing academic difficulty and are often reluctant to seek help even if they do recognize their difficulty (Levin & Levin, 1991). These findings are especially disturbing when viewed in light of meta-analysis research, which reveals that academic-support programs designed for underprepared students exert a statistically significant effect on their retention and grades when they are utilized, especially if these services are utilized by students during their freshman year (Kulik, Kulik, & Shwalb, 1983).

Taken together, the foregoing set of findings strongly suggests that institutions should deliver academic support *intrusively*—by *initiating* contact with students and aggressively bringing support services *to them*, rather than offering services *passively* and *hoping* that students will come and take advantage of them on their own accord. Academic advisors are in the ideal position to “intrusively” connect students with academic support professionals, who can provide students with timely assistance before their academic performance and persistence are adversely affected by ineffective learning strategies.

Another major way in which advisors may promote student retention is by connecting students to student development services and co-curricular programs. The importance of student involvement in campus life for student retention is documented by findings demonstrating that students who are more socially integrated or involved in campus life, and feel they are part of the campus community, are more likely to persist to graduation (Terenzini, 1986; Tinto, 1987). Academic advisors are well positioned to promote student persistence by educating students about the value of co-curricular participation and encouraging their involvement with student development services. Roger Winston (1994) argues that this is the way in which developmental advising exerts its greatest impact:

Developmental advising has the greatest impact through supporting and challenging students to take advantage of the multitude of learning opportunities outside of their formal classes and to use the human and programmatic resources designed to promote development of their talents and broaden their cultural awareness. Developmental advising has a multiplier effect

that increases students' involvement in institutional programs and services; this positively influences retention for the institution and increases the overall impact of educational experience for students (p. 114).

4. Student-Faculty Contact Outside the Classroom, Academic Advising, and Student Retention

In a national report on higher education, the Education Commission of the States included out-of-class contact with faculty as one of its 12 essential attributes of good practice claiming that, "Through such contact, students are able to see faculty members less as experts than as role models for ongoing learning" (1995, p. 8). This assertion is supported by a broad base of research, which demonstrates that student-faculty contact outside the classroom is strongly correlated with student retention (Bean, 1981; Pascarella 1980; Pascarella & Terenzini 1979, Terenzini & Pascarella, 1977, 1978; Pascarella & Terenzini, 1991).

Drawing on data generated by a longitudinal study of 200,000 students at 300 institutions of all types, Astin (1977) reports that, "Student faculty interaction has a stronger relationship to student satisfaction with the college experience than any other variable [and] any student characteristic or institutional characteristic" (p. 223).

Consistent with Astin's quantitative findings is the following observation made by Lee Noel (1978), based on his extensive consulting experiences with colleges and universities interested in promoting student retention:

It is increasingly apparent that the most important features of a "staying" environment relate to the instructional faculty. Students make judgments about their academic experience on the basis of such factors as quality of instruction, freedom to contact faculty for consultation, availability of faculty for consultation, and faculty involvement outside the classroom (pp. 96-97).

Vince Tinto offers a similar observation: "Institutions with low rates of student retention are those in which students generally report low rates of student-faculty contact. Conversely, institutions with high rates of retention are most frequently those which are marked by relatively high rates of such interactions" (1987, p. 66).

Tinto (1975) also reports that out-of-class contact between faculty and students has particularly powerful effects on the persistence of students who are "withdrawal prone." After conducting interviews with especially high-risk students who overcame the odds and succeeded in college, Tinto found that, "*In every case*, the students cited one or two events, when someone on the faculty or—less commonly—the staff had made personal contact with them outside the classroom. That's what made the difference" (quoted in Levitz, 1990). Pascarella and Terenzini (1979) also found that the frequency of non-classroom contact between students and faculty to discuss academic issues had its most positive influence on the persistence of students with low initial commitment to college, and students whose parents had relatively low levels of formal education.

It is noteworthy that student-faculty interaction outside the classroom has been found to exert a direct effect on student retention that is independent of other potentially influential or confounding variables (e.g., students' level of involvement with college peers, academic preparedness, or educational aspirations at college entry). As Pascarella (1980) concludes, after critically reviewing and synthesizing a large number of studies investigating the relationship between student-faculty contact and educational outcomes:

The significant associations between student-faculty informal contact and educational outcomes are not merely the result of covariation with individual differences in

student entering characteristics or with college experiences in other areas, such as peer culture. Rather, various facets and quality of student informal contact with faculty may make a unique contribution to college impact. In turn this suggests the possibility that colleges and universities may be able to positively influence the extent and quality of student-faculty contact, and thereby faculty impact on students, in ways other than the kinds of students they enroll (pp. 564-565).

One way that colleges and universities may be able to positively influence the extent and quality of student-faculty contact is through high-quality academic advisement—delivered by faculty through out-of-class interaction with students. Given the direct empirical association between student retention and student-faculty contact outside the classroom, especially when such interaction involves discussion of students' academic and career plans (Wilson, 1975; Terenzini, 1986), it is reasonable to predict that high-quality advising will have a significant impact on student retention in general, and the retention of at-risk (withdrawal-prone) students in particular. In fact, academic advisement may be the institution's only structure that ensures that students have personal, one-to-one contact with a faculty member. The need to ensure such personal contact is underscored by national survey research conducted by the Carnegie Foundation for the Advancement of Teaching, which reveals a substantial decline in the percentage of undergraduates who agree with the statement, "There are professors at my college whom I feel free to turn to for advice on personal matters" (Boyer, 1987).

5. *Student Mentoring, Academic Advisement, and Student Retention*

The number of colleges offering mentoring programs is on the rise (Haring, 1997), and mentoring is increasingly being viewed as a tool for promoting student retention (Walker & Taub, 2001), particularly the retention of first-year students (Johnson, 1989). Mentoring has the potential to reduce students' feelings of marginality, increasing their sense of personal *significance*—that they "*matter*" (Schlossberg, Lynch, & Chickering, 1989), and can provide an important "validation" experience for first-generation students, for whom the transition to college is not a normal or routine rite of passage (Rendon, 1994).

The importance of mentoring for contemporary college students is well expressed by the indefatigable leader of the first-year experience movement, John Gardner:

Students need mentors and facilitators. They need, in the words of Carl Rogers, authentic professional human beings who are worthy of emulation. They need models who exhibit professional behavior, a sense of commitment and purposefulness, and a sense of autonomy and integrity in a world that generates enormous stress. Students cannot be told how to do this; authenticity cannot be transmitted through lectures" (1981, p. 70).

The availability of exemplary, caring role models is valuable for all students, but may be especially critical to the retention and success of underrepresented, first-generation college students who do not have college role models at home. Vince Tinto notes that, "While role modeling seems to be effective in retention programs generally, it appears to be especially important among those programs concerned with disadvantaged minority students" (1987, p. 161).

Research on mentoring indicates that it has a positive impact on the personal and professional development of young adults (Levinson, 1978). There is also a growing body of research in higher education that suggests an empirical link between student mentoring and student retention (Campbell & Cambell, 1997; Wallace & Abel, 1997). For instance, Miller, Neuner, and Glynn (1988) used an experimental research design in which students were randomly assigned to either an experimental

group—who received mentoring, or a control group—who did not. It was found that students who received mentoring evinced higher retention rates than non-mentored students with similar pre-enrollment characteristics.

Despite the retention-promoting promise of mentoring, one of the major logistical stumbling blocks for implementing mentoring programs on a large-scale basis is the fact that mentoring is traditionally delivered via dyadic (1 to 1) relationships, thus making it difficult to find a sufficient number of mentors to sustain a mentoring program that reaches a significant number of students (Redmond, 1990). However, the results of one recent study reveals that “network” mentoring programs, in which multiple students are mentored by one college faculty or staff member, are comparable in effectiveness to traditional “dyadic” (1 to 1) mentoring arrangements—as measured in terms of student satisfaction with the quality of the mentoring relationship and the frequency of contact with their mentor (Walker & Taub, 2001). This finding suggests that traditional academic advisement programs have the potential to co-function as mentoring programs, because a ratio of multiple mentees (students) to one mentor (advisor) may also enable the advantages of mentoring to be realized. While advising and mentoring have been traditionally deemed as distinctly different programs, even a cursory look at some of the criteria cited in the scholarly literature for effective mentors appear to be very compatible with the characteristics of effective advisors. For example, Johnson (1989) identifies the following characteristics as qualities of effective mentors: (a) more mature than the mentee, (b) interpersonal skill, (c) willingness to commit time, and (d) knowledge of the campus. Certainly, these are qualities that also characterize effective advisors.

Research on from the perspective of students, as advisees, repeatedly points to the conclusion that they value most highly academic advisors who serve as mentors—who are accessible, approachable, and helpful in providing guidance that connects their present academic experience with their future life plans (Winston, Ender, & Miller, 1982; Winston, Miller, Ender, Grites, & Associates, 1984; Frost, 1991; Gordon, Habley, & Associates, 2000). Given the similarity of desirable qualities cited for mentors and advisors, in conjunction with the research suggesting that mentoring may be effectively delivered by networking multiple mentees with one mentor, it appears as if the retention-promoting potential of mentoring programs may be achieved as effectively (and more efficiently) through advisement programs, particularly if advisors are well prepared and adequately rewarded for this role. Since advisement focuses on an issue so central to the personal lives of students—the connection between their present collegiate experience with their future life plans—and is delivered by an experienced person who has already navigated a similar course, it appears that mentoring is an integral and inescapable element of academic advisement. As such, advising programs should be viewed and pursued with the same enthusiasm for promoting student retention as mentoring programs.

Defining and Describing “Quality” Academic Advising

Findings reviewed in the previous section point to the conclusion that enhancing the quality of academic advising should improve the rate of student retention. However, any potentially effective attempt to increase student retention through improvement in academic advisement must be guided by a clear vision of what “good” or “quality” advising actually is—because if we cannot define it, we cannot recognize it when we see it, nor can we can assess it or improve it. Among the factors that contribute to poor advising, lack of consensus about the role or function of the advisor (Wyckoff, 1999). The following statements, selectively culled from the scholarly literature on academic advising, have the potential to serve as starting points for defining what “quality” academic advisement is, and may serve as focal points for guiding the development of effective advising practices and procedures.

(a) “Developmental academic advising is a systematic process based on a close student-advisor relationship intended to aid students in achieving educational, career, and personal goals through the utilization of the full range of institutional and community resources. It both stimulates and supports students in their quest for an enriched quality of life” (Winston, Miller, Ender, & Grites, & Associates, 1984, p. 538).

(b) “The formation of relationships that assure that at least one educator has close enough contact with each student to assess and influence the quality of that student’s educational experience is realistic only through a systematic process, such as an academic advising program. It is unrealistic to expect each instructor, even with small classes, to form personal relationships of sufficient duration and depth with each student in his or her class to accomplish this” (Winston, Miller, Ender, & Grites, & Associates, 1984, p. 538).

(c) “Developmental academic advising is *not* primarily an administrative function, *not* obtaining a signature to schedule classes, *not* a conference held once a term, *not* a paper relationship, *not* supplementary to the educational process, [and] *not* synonymous with faculty member” (Ender, 1983, p. 10).

(d) “Academic advising can be understood best and more easily reconceptualized if the process of academic advising and the scheduling of classes and registration are separated. Class scheduling should no be confused with educational planning. Developmental academic advising becomes a more realistic goal when separated from class scheduling because advising can then go on all during the academic year, not just during the few weeks prior to registration each new term. Advising programs, however, that emphasize registration and record keeping, while neglecting attention to students’ educational and personal experiences in the institution, are missing an excellent opportunity to influence directly and immediately the quality of students’ education and are also highly inefficient, since they are most likely employing highly educated (expensive) personnel who are performing essentially clerical tasks” (Winston, Miller, Ender, & Grites, & Associates, 1984, p. 542).

(e) “Students may enter the advising process with a set of perceptions and expectations quite unrelated to those of the advisor. The importance of the interpersonal relationship for students should not be underestimated (Wyckoff, 1999, p. 3).”

From the *students’* perspective, previously cited research points to the conclusion that undergraduates value most highly academic advisors who function as *mentors* or *counselors*, and who are: (a) *available/accessible*, (b) *knowledgeable/helpful*, and (c) *personable/approachable*. Integrating the perspectives of both student advisees and advising scholars, high-quality academic advisement may be distilled into, and defined in terms of, three key (“core”) advisor roles or functions.

1. Advisor as *humanizing agent*:

An advisor is someone who interacts with students outside the classroom on a less formal, more frequent, and more continuous basis than course instructors. Students’ instructors will vary from term to term, but an academic advisor may be the one institutional representative with whom each student can have *continuous contact* and an *ongoing relationship* that may endure *throughout* the college experience. Thus, an advisor is uniquely positioned to develop a *personal relationships* with

students and to serve as a humanizing agent—someone whom students feel comfortable seeking out, who knows them by name, who knows their individual interests, aptitudes, and values, and who takes special interest in their personal experiences, progress, and development.

2. Advisor as *counseling/mentoring agent*:

An advisor is an *experienced guide* who helps students navigate the bureaucratic maze of institutional policies and administrative protocol, and a *referral agent* who directs and connects students to campus support services that best serve their needs. An advisor is also a *confidante* to whom students can turn for advice, counsel, guidance, or encouragement; who listens to them actively, empathically, and non-judgmentally; who allows them to freely explore their personal values and belief systems; and who serves as a *student advocate*—treating them as clients to be served and developed—rather than as subordinates to be evaluated and graded.

3. Advisor as *educational/instructional agent*:

An advisor is someone who can equip students with specific strategies for success, and who can bring integration and coherence to the students' college experience—by promoting their appreciation of the college *mission*, the college *curriculum* (e.g., the purpose of general education), and the *co-curriculum* (e.g., the educational value of experiential learning outside the classroom).

An advisor is also someone who, through effective questioning techniques, helps students become more self-aware of their distinctive interests, talents, values, and priorities; who enables students to see the “connection” between their present academic experience and their future life plans; who broadens students' perspectives with respect to their personal life choices, and sharpens their cognitive skills for making these choices—e.g., effective problem-solving, critical thinking, and reflective decision-making.

Systemic *Strategies for Enhancing the Quality of Academic Advising*

The above-cited qualities paint a picture of the ideal advisor in an ideal advising scenario. In order for the present reality of academic advisement in higher education to begin to approach this ideal state, several systemic changes need to take place in the way most advising programs are presently designed and delivered. Aforementioned findings from national surveys and national reports strongly suggest that academic advisement programs in higher education are not presently well positioned to deliver high-quality developmental advising. Thus, it appears as if academic advising at many institutions needs systematic and systemic overhaul before it can be expected to approach a level of program quality that exerts dramatic impact on student retention. To this end, the following systemic strategies are offered as major fulcrums for leveraging positive change in the quality and retention-promoting impact of academic advisement.

1. Provide strong *incentives* and *rewards* for advisors to engage in high-quality advising.

Advising runs the risk of being perceived as a supplemental, low-status, and low-priority activity by college faculty because it typically does not carry the same professorial status and resume-building value as conducting research, acquiring grants, presenting papers at a professional conference, or engaging in off-campus consulting. Even at postsecondary institutions that do not place a high priority on research and publication, classroom teaching is typically valued more highly

than academic advising. Without any incentives to pursue excellence, it seems unlikely that advisors will be motivated to invest the time and energy needed to improve the quality of their work.

Faculty have only a finite amount of time available to them to perform their three primary professional responsibilities: teaching, research, and service. Given increasing expectations for faculty to publish at many colleges and universities (Kuh, Schuh, Whitt, & Associates, 1991), while maintaining their traditional teaching loads, it is reasonable to expect that the degree of faculty commitment to academic advisement will be severely compromised by institutional reward systems that place greater value on competing professional priorities.

Before we can expect to see substantive improvement in the quality of advising received by undergraduate students, and concomitant improvement in their retention rates, higher education administrators must begin to intentionally and creatively redesign traditional reward systems to place higher value on academic advisement as a professional responsibility. For example, professional workloads could be intentionally reconfigured and funds reallocated to allow faculty sufficient time to engage in true *developmental* advising—as opposed to perfunctory course scheduling. Academic advising could be redefined as a bona fide *instructional* activity and, as such, might be counted as equivalent to the teaching of one course in a faculty member's workload. If advising were redefined and elevated to the status of college teaching, it may even be possible to allow faculty with historically poor records of advising performance the option of substituting an additional course in their teaching load, in lieu of advising. This policy might serve to increase the likelihood that faculty who do advise are those who possess a genuine interest in and commitment to delivering high-quality advising.

Faculty research and scholarship could be more broadly defined to include research on the advising process, and such scholarship could be counted in decisions about promotion and tenure in a fashion similar to discipline-driven research. Such an expanded view of scholarship would be consistent with the late Ernest Boyer's call for a "new scholarship" that would include the scholarship of "teaching" and the scholarship of "application" (Boyer, 1991). Also, professional (non-faculty) advisors might be given the opportunity to advance in rank from assistant to associate to full (tenured) status—based on the quality of their advising and advising scholarship—just as faculty have been traditionally promoted on the basis of their teaching and research.

Research on factors that promote faculty change toward student-centered professional activities indicates that two of the most common barriers to the change process are the influence of educational tradition and limited incentives for faculty to change (Bonwell & Eison, 1991). For high-quality advising to become a reality, advisors need (a) to know that the institution considers advising to be a high-priority professional activity that is equivalent in value to classroom instruction or research publication, (b) be given the time to do it, and (c) to know that the time they do devote to it is counted and weighed in decisions about their professional rank, promotion, and tenure.

2. Strengthen advisor *orientation, training, and development*, and deliver them as essential components of the institution's *faculty/staff development program*.

National reports calling for improvement in the quality of undergraduate education have repeatedly emphasized the need for instructional development of faculty, because graduate school typically does not prepare them for college teaching (National Institute of Education, 1984; Association of American Colleges, 1985; Wingspread Group, 1993). The very same case could be made for college advising, because faculty are the most prevalent advisors at all types of colleges and universities (Lareau, 1996), yet the importance of professional development for academic advisors has been given short shrift by national reports calling for higher educational reform. In fact, it is

probably safe to say that advising is the professional role for which faculty are *least* prepared to perform. Undoubtedly, faculty receive even less preparation for academic advising during their graduate school experience than they do for undergraduate teaching. (For instance, there are no “advising assistantships” in graduate school, as there are teaching assistantships.) Lack of advisor preparation *before* entering the professoriate is subsequently compounded by the lack of substantive professional development programs for faculty advisors after they *enter* the professoriate. Recent national survey results obtained from a sample of approximately 1000 postsecondary institutions indicate that only 55% of American colleges and universities provide any type of preparation or training for advisors of first-year students (Policy Center on the First Year of College, 2003). The dire need for better advisor training to realize the goal of developmental academic advising is well articulated by Ender (1994):

Faculty are, for the most part, powerless to implement developmental advising without adequate training. To be an effective developmental advisor requires skills, competencies, and knowledge beyond any given academic discipline. Improving communication, building relationships, setting goals, and enhancing knowledge of campus and community resources are but a few examples of training areas to which faculty and other advisors need exposure (p. 106).

Redressing the underpreparedness of faculty advisors requires systematic design and delivery of intensive and extensive professional development programs, which should be more substantive than the common practice of reducing advisor development to an advising “training” program that begins and ends with a one-shot, immersion orientation session for new advisors. Orientation needs to be augmented by professional development seminars and workshops delivered *in person*, and supplemented by advisor support delivered *in print*—in the form of a carefully constructed and regularly updated “advising handbook.” A comprehensive advisor handbook should include: (a) current *curricular* information (e.g., up-to-date information on course requirements, sequences, and prerequisites); (b) current information relating to academic *policies and procedures* (e.g., procedures for adding/dropping classes and petitioning for an incomplete or changed grade); (c) student *self-help and self-management* strategies (e.g., strategies for learning and time management); (d) names, phone numbers, and office hours of key *campus- and community-support services* (e.g., learning assistance center, career development center, personal counseling center, local service-learning opportunities); and (e) strategies relating to the *process of developmental advising* (e.g., student-referral strategies, and concrete advisor behaviors or practices that effectively implement developmental advising).

Research reviewed by Wyckoff (1999) indicates that advisor preparation and training has a demonstrable impact on student retention, as evidenced by lower attrition rates for students whose advisors receive training in advising techniques—relative to students whose advisors are untrained.

3. *Assess and evaluate the quality of academic advisement.*

Regular assessment of academic advisement sends a clear message to advisors that student advising is an important professional responsibility and increases the likelihood that weaknesses in the advising program are identified and corrected. Conversely, failure to monitor and evaluate the quality of advising tacitly communicates the message that it is a student service which is not valued by the institution. As Linda Darling-Hammond, higher education research specialist for the Rand Corporation, points out: “If there’s one thing social science research has found consistently and unambiguously . . . it’s that people will do more of whatever they are evaluated on doing. What is

measured will increase, and what is not measured will decrease. That's why assessment is such a powerful activity. It cannot only measure, but change reality" (quoted in Hutchings & Marchese, 1990). Thus, the mere fact that advisors are aware that their advising is being assessed may, in itself, lead to improvement in the quality of academic advisement they deliver.

Assessment should reflect the perspectives of advisors, as well as students. Advisors should be given the opportunity to assess the quality of *administrative support* they receive for advising—for example, the effectiveness of orientation, training, and development they received, the usefulness of support materials or technological tools provided for them, the viability of their advisee case load, and the effectiveness of advising administrative policies and procedures. National survey research of first-year student advising practices indicates that only 11% of postsecondary institutions involve advisors as evaluators in the assessment process (Policy Center on the First Year of College, 2003). This is a disappointing finding, because involving advisors in the assessment process can serve two very valuable purposes: (a) provides front-line feedback to the advising program director that can be used for program improvement, and (b) enables advisors to become active agents (rather than passive recipients) of evaluation, which serves to increase their personal investment in, and "ownership" of, the advisement program.

Advisors can also become more active agents in the assessment process if they engage in *self-assessment*. This could be done in narrative form, perhaps as part of an advising portfolio, which would include (a) a personal statement of advising philosophy, (b) advising strategies employed, (c) advisor development activities, (d) self-constructed advising materials (e.g., an advising syllabus), and (e) responses to student evaluations. This type of advisor self-assessment could also be used as evidence of advising quality and counted in decisions about promotion and advancement in rank, comparable to how the "teaching portfolio" is used in faculty evaluation of instructional effectiveness.

4. Maintain *advisee-to-advisor ratios* that are *small* enough to enable delivery of *personalized* advising.

Existing advisee:advisor ratios at many colleges and universities are from being conducive to the formation of a personal relationship between student and advisor, which is the foundation for effective developmental advising. As Winston (1994) notes: "Unfortunately, on many campuses today (especially at public four-year institutions) advising centers have student-advisor ratios in the hundreds and these ratios are growing. With such workloads, developmental advising is impossible, no matter what the philosophy or skills of the advisors" (p. 113).

The same can be said for many public community colleges. In the California community colleges, for example, the average student/advisor ratio is about 600:1 (Pam Schachter, personal communication, December 12, 2002). Advising sessions are not typically scheduled by personal appointment, and they are not conducted in a private office setting; instead, they take place in a large, impersonal center on a drop-by basis, which often results in the same student seeing a different advisor each time she "drops by."

One way to begin the process of reducing student/advisor ratios to a level that allows for personalized advising is to increase the number of advisors deployed. This could be accomplished in a cost-effective manner that would not require hiring of additional personnel, if academic advisement were to be conceptualized as a shared responsibility assumed by multiple members of the college community, namely: faculty, professional staff, administrators, student paraprofessionals (trained peers), graduate students, and possibly retired faculty or staff. If such a team or community approach to advising were adopted, then student:advisor ratios might be reduced to more

manageable levels—ideally, to a level at which each and every student has a personally assigned advisor, and all advisors have case loads small enough to allow them to provide individualized attention and personalized advising to each one of their advisees.

5. Provide strong *incentives* for *students to meet regularly* with their advisors.

At some 4-year colleges, and most community colleges, students can register for classes without ever seeing an academic advisor (e.g., via electronic or telephonic registration). Leaving students on their own to design an educational plan and to select courses relevant to that plan, means that students completely bypass the advising process, along with its retention-promoting potential. This is an especially risky procedure to employ at any college or university, but especially at community colleges, which (a) offer a complex array of multi-purpose courses designed to fulfill multiple missions (e.g., transfer-track courses, technical-vocational track courses, personal enrichment courses), and (b) are open-admission institutions that attract higher proportions of first-generation college students, students with diverse educational goals and intentions, and students with diverse levels of academic preparedness. While the practice of registration without advisement may be consistent with the community colleges' historic goal of promoting college *access*, it may be simultaneously inconsistent with the goal of promoting college *success*—because receipt of absolutely no advising (or even informal advice) militates against their prospects for retention to program or degree completion. (Such a shortsighted focus on promoting student recruitment without attention to subsequent retention is reinforced by state funding practices that annually reward postsecondary institutions for the total number of students enrolled [FTEs], but which provide no fiscal incentive or reward for retaining and advancing those students who do enroll.)

Requiring an advisor's signature as a pre-requisite or pre-condition for course registration, as well as for dropping or adding classes once the academic term has begun, provides a strong incentive for students to connect with their advisors, and should serve to promote their retention by (a) enhancing the quality of students' educational planning and decision making, and (b) increasing student contact with faculty and staff outside the classroom.

Strong incentives should also be provided for students to meet with advisors at times other than the hurried and harried period of course registration, i.e., at times when advisors have time to interact with students as persons—rather than “process” them as registrants, and when advisors have the opportunity to explore or clarify students' broader, long-term educational plans—rather than focusing narrowly, myopically, and episodically on the imminent, deadline-driven task of class scheduling.

One promising *curricular* vehicle through which advisors may be given the opportunity to engage their advisees in meaningful long-range educational planning is the first-year seminar. Presently, 20% of institutions offering first-year seminars have arranged for students to be placed into sections of the course that are taught by their academic advisors (National Resource Center for the First-Year Experience, 2003), thus ensuring regular advisor-advisee contact during the critical first term of college. Other institutions have built assignments into the first-year seminar that require students to meet with their academic advisors to engage in long-term educational planning and decision-making (Cuseo, in press).

6. Identify *highly effective advisors* and “*front load*” them—i.e., position them at the front (start) of the college experience to work with first-year students, particularly first-year students who may be “at risk” for attrition.

Research indicates that at least one-half of all students who drop out of college will do so during their freshman year (Consortium for Student Retention Data Exchange, 1999). According to Lee Noel (1985), “The critical time in establishing the kind of one-to-one contacts between students and their teachers and advisers that contribute to student success and satisfaction occur during the first few weeks of the freshman year” (p. 20). Support for this observation is provided by the National Institute of Education’s (1984) landmark report on the quality of undergraduate education in America. Its panel of distinguished scholars’ first recommendation for improving undergraduate education was “front loading”, which they define as the reallocation of faculty and other institutional resources to better serve entering students.

John Gardner suggests that front-loaded support for first-year students during their early weeks on campus works like the marketing concept of “second sale,” whereby the college helps students overcome “buyers remorse” and make a long-term commitment to remain at the institution (Gardner, 1986, p. 267). High-quality advising during the first-semester of college may be one way to promote long-term student commitment and retention. The importance of quality first-year advisement for the retention of African-American students, in particular, is empirically supported by research indicating that the frequency of personal contacts between black freshmen and their academic advisors is the variable that is most strongly associated with retention through the critical freshman year; furthermore, the frequency of student-advisor contact is significantly higher if the first contact occurs *early* in the freshman year (Trippi & Gheatham, 1989).

7. Include *advising effectiveness* as one *criterion* for *recruiting and selecting new faculty*.

Beal and Noel (1980) surveyed 947 colleges and universities, asking administrative officials involved with student retention the following question: “What makes students stay?” Ranking first in response to this question was “a caring faculty and staff.” As Tinto (1987) expresses it, “Students are more likely to become committed to the institution and, therefore stay, when they come to understand that the institution is committed to them. There is no ready programmatic substitute for this sort of commitment. Programs cannot replace the absence of high quality, caring and concerned faculty and staff” (p. 176).

It may not be easy to “train” people to develop these altruistic characteristics; more realistically, individuals with these qualities need to be *found*. The harvesting of caring, concerned, and committed faculty and staff begins with careful attention to these qualities during the recruitment and selection process. College position announcements should publicly and explicitly state that academic advising is an important component of the position, and candidates’ written applications and personal interviews should be scrutinized for signs of a “caring” disposition, and for a demonstrated interest in and commitment to student advising.

Summary and Conclusion

Research reviewed in this manuscript strongly suggests that there is much need for, and room for, improvement in the quality of academic advisement and the rate of student retention in higher education. The research also suggests that improvement in the former is associated with improvement in the latter. However, to promote extensive and enduring gains in student retention, academic advisement programs need to undergo systemic change at four foundational levels: (a) recruitment and selection of advisors, (b) preparation and development of advisors, (c) recognition and reward for advisors, and (d) advisor assessment and program evaluation. As Habley and Crockett conclude from national surveys of academic advising practices: “Training, accountability,

evaluation, and recognition/reward are the cornerstones of performance in every field or job. Yet those continue to be stumbling blocks in most advising programs” (1988, p. 68). These four elements are also the cornerstones and building blocks that undergird construction of any high-quality advising program. Only when sufficient institutional attention and resources are devoted to securing each of these foundational features of program development will the quest for quality academic advisement be successful and its potential for promoting student retention be fulfilled.

Final Note: For strategies relating to *assessment* of academic advising, see the following URL: http://www.advising.hawaii.edu/nacada/assessment/G/advising_assess_tools.asp,

Or, contact Joe Cuseo at: jcuseo@marymountpv.edu

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